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REMARKS/ARGUMENTS

After entry of this amendment, claims 33 and 47-60 are pending.

Claim 33 is amended to remove the language drawn to a nucleic acid sequence comprising the sequence of SEQ ID NO: 13 wherein T is U. This embodiment of the present invention has been incorporated into new claim 56. Claim 49 is amended to clarify that the host cells are isolated and purified. Claim 53 is amended to remove the multiply dependent language. Claim 54 is amended to correct a clerical error.

New claims 55-59 are added to recite additional embodiments of the invention and contain previously elected subject matter. Specifically, new claim 55 depends from claim 54 and refers to the fragments that contain coding sequences. New claim 56 provides nucleic acid molecules are complementary to the fragments set forth in claim 54. New claims 58-60 provide nucleic acid molecules that hybridize under stringent conditions to a nucleic acid sequence comprising the sequence of SEQ ID NO: 13; or a nucleic acid sequence 100% complementary thereto.

Support for these new claims is found in the original specification and claims as filed and specifically on page 10, lines 35-38 and page 11, line 33 through page 12, line 4. No new matter is added by these amendments and new claims.

Claim Objection

The Examiner objected to claim 52 as being in improper form.

Applicants respectfully request reconsideration and withdrawal of this objection for the following reason.

In an effort to place the application in condition for allowance, Applicants have amended claim 52 to depend solely from claim 48, thereby removing the multiply dependent language.

Reconsideration of this objection is requested.

35 USC § 101 Rejection

The Examiner rejected claim 49 under 35 USC § 101 and asserted that the subject matter contained therein is non-statutory subject matter.

Applicants respectfully request reconsideration and withdrawal of this rejection for the following reason.

In an effort to place the application in condition for allowance, Applicants have amended claim 49 to specify that the host cell is isolated and purified.

Reconsideration of this rejection is requested.

35 USC § 112, First Paragraph Rejections

(i) *The Examiner rejected claim 54 under 35 USC § 112, first paragraph and asserted that the fragments of SEQ ID NO: 13 are not disclosed in the specification.*

Applicants respectfully request reconsideration and withdrawal of this rejection for the following reason.

One of ordinary skill in the art would readily be able to recognize the nucleic acid fragments forming the exons and introns of KLK-L2 using the specification, Figure 7, and the sequence provided by SEQ ID NO: 13. As the Examiner is aware, the exons are represented by capital letters (page 5, line 15) and the introns are represented by lower case letters (page 5, line 14) and are clearly illustrated in Figure 7. Further, the start and stop codons are circled (page 5, line 15) and the translated amino acids are shown underneath the coding regions provided by the exons (page 5, lines 16-17).

By using the specification, Figure 7, and the sequence provided by SEQ ID NO: 13, one of ordinary skill in the art would readily be able to determine that the first nucleotide in Figure 7 is nucleotide 2221 of SEQ ID NO: 13 and that the first identified fragment of SEQ ID NO: 13 is the first exon of the coding region in Figure 7, i.e., nucleotides 2221-2293 of SEQ ID NO: 13. The person of ordinary skill provided with this specification would also be able to determine the other exons, i.e., the other coding sequences in Figure 7, which include nucleotides 4762-5023, 5763-6018, 6105-6238, and 11092-11247. These nucleic acid fragments that encode a KLK-L2 are also presented in new claim 55.

The remaining nucleic acid fragments, including nucleotides 2294-4791, 5024-5762, 6020-6104, 6237-11091 of SEQ ID NO: 13, are the introns of the genomic sequence, i.e., the non-coding regions. These fragments are also readily identified in Figure 7.

In view thereof, Applicants respectfully assert that the fragments of claim 54 are fully set forth in Figure 7. For the Examiner's convenience, Applicants have enclosed a copy of Figure 7 as Exhibit A noting the claimed fragments.

Reconsideration of this rejection is requested.

(ii) *The Examiner rejected claims 33, 47, 48, 50, and 51 under 35 USC § 112, first paragraph and asserted that the specification does not support a nucleic acid molecule comprising a nucleic acid sequence of SEQ ID NO: 13 wherein T is U, a vector or probe comprising said nucleic acid, a nucleic acid molecule differing from SEQ ID NO: 13 in codon sequences due to the degeneracy of the genetic code, wherein T is U, or a composition comprising said nucleic acid molecule and a pharmaceutically acceptable carrier, excipient or diluent.*

Applicants respectfully request reconsideration and withdrawal of this rejection for the following reason.

In an effort to place the claims in condition for allowance, Applicants have amended claim 33 by deleting reference to nucleic acid molecules of SEQ ID NO: 13 wherein T is U. This rejection is therefore mooted as applied to claim 33, and any claims which depend therefrom, including claims 47, 48, 50, and 51.

Applicants have incorporated the deleted subject matter of claim 33 into new claim 56. Applicants assert that any molecular biologist skilled in the art would understand the routine procedure by which a DNA sequence is converted into a RNA sequence, without performing undue experimentation. Specifically, the conversion of a thymine (T) in DNA to uracil (U) in RNA is well understood by those skilled in the art. It would therefore be routine for one of skill in the art to utilize the DNA sequence of SEQ ID NO: 13 to prepare the corresponding RNA sequence. Using the teachings in the specification for the DNA sequence, one of ordinary skill in the art would readily be able to prepare an RNA molecule, prepare an RNA sequence with degeneracy codons in the coding sequence, prepare a vector and/or probe containing the RNA molecule, and prepare pharmaceutical compositions containing the RNA molecule. The teachings of this specification coupled with conventional knowledge in the art provide all that is necessary for one of skill in the art to readily generate the subject matter of claim 56.

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Applicants therefore assert that claim 56 is fully supported by the specification and is not new matter.

Reconsideration of this rejection is requested.

The Director is hereby authorized to charge the extra claims fee of $258 for an additional three (3) independent claims over 20, any deficiency in any fees due with the filing of this paper, or credit any overpayment in any fees to our Deposit Account Number 08-3040.

Respectfully submitted,

HOWSON AND HOWSON
Attorneys for Applicants

By Mary E. Bak

Mary E. Bak
Registration No. 31,215
Spring House Corporate Center
Box 457
Spring House, PA 19477
(215) 540-9200